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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/027,246	12/20/2001	Jeffrey E. Fish	KCX-400 (15421)	9059

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DORITY & MANNING, P.A.
POST OFFICE BOX 1449
GREENVILLE, SC 29602-1449

EXAMINER	
BEFUMO, JENNA LEIGH	

ART UNIT	PAPER NUMBER
1771	

DATE MAILED: 09/09/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/027,246	FISH ET AL.	
	Examiner	Art Unit	
	Jenna-Leigh Befumo	1771	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *04 October 2002* .

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-30* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-30* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *25 March 2002* is/are: a)☐ accepted or b)☒ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

Drawings

1. The drawings are objected to because Reference number 10 is not in Figure 1 as described in the specification (page 21, line 15). Additionally, the height "h" of the pockets is not in Figure 2, as describe in the specification (page 26, line 29), but instead in Figure 4. A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Double Patenting

2. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970);and, *In re Thorington,* 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

3. Claims 1, 9, 10, and 11 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 1 of copending Application No. 10/027787. Although the conflicting claims are not identical, they are not patentably distinct from each other because the claim in Application No. 10/027787 encompasses the scope of claims 1, 9, 10, and 11 since all the limitations of claim 1 in Application 10/027787 are in claims 1, 9, 10, and 11 of this application.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. Claims 1 – 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bjornberg et al. (4,982,535) in view of Tanzer et al. (5,411,497).

Bjornberg et al. discloses an absorbent pad having a liquid-impervious back sheet, regions of absorbent material, and a liquid-pervious cover sheet (abstract). The cover sheet has pockets formed therein, in which the regions of absorbent material are disposed. The cover sheet is then bonded, either adhesively or by heat sealing, directly to the back sheet along lines which separate the regions of absorbent material (abstract). The absorbent pad also has an outer border where the cover sheet is bonded directly to the back sheet which is shown to be wider then the bond lines which form the pocket regions in Figure 2 (column 4, lines 59 – 61). The border corresponds to the Applicant's perimeter regions and the bond lines forming the channels **9** correspond to the Applicant's inner regions. The liquid impervious backing sheet is made from conventional backing sheet materials such as a polyethylene film (column 3, lines 59 – 62). The cover sheet can be any non-woven materials which are conventionally used in the disposable diaper art (column 4, lines 35 – 40). The absorbent material is made from absorbent material which has a high capacity to absorb liquid and any conventional absorbent material can be used

(column 4, lines 1 – 9). The absorbent pad can be used as an incontinence pad with the liquid permeable layer placed adjacent to a person's body to absorb liquid (column 4, line 66 – column 5, line 5).

The pocket regions formed by bonding the cover sheet to the back sheet can be in various shapes such as a diamonds, squares, hexagons, or triangles (column 4, lines 13 – 17). The pockets can range in size from 10 x 10 mm up to 100 x 100 mm, and Bjornberg et al. discloses the diamond shape has a size of 62 x 28 mm (column 4, lines 25 – 28). Thus, the diamond shape has a length to width ratio of greater than 2. And the size range for the pocket regions can produce a length to width ratio of up to 100:10, or 10. The depth of the pockets can vary from 1 to 20 mm or more (column 4, lines 33 – 34). Thus, the width to height ratio can range from 10:20 to 100:1, or 0.5 to 100.

While Bjornberg et al. discloses bonding the outer layer together to form pocket regions, Bjornberg et al. fails to teach using bonds which will rupture due to the expansion of the absorbent particle. Tanzer et al. is drawn to absorbent materials. Tanzer et al. discloses that absorbent pads having superabsorbent particles in pocket regions are known (column 1, lines 15 – 35). However, the previous products do not efficiently utilize the superabsorbent material and the liquid uptake of the superabsorbent material is limited and produces leaks. Tanzer et al. discloses that using a water-sensitive attaching means allows the absorbent pad to maintain the location of the superabsorbent material while accommodating the increased volume of the swollen super-absorbency material (column 1, lines 50 – 63). The water-sensitivity of the attaching means helps to maintain the channels between the pocket regions to facilitate the flow of the liquid to each of the pocket regions while more efficiently utilizing the absorbent material

and improving the absorption characteristics of the structure (column 1, line 64 – column 2, line 5). Tanzer et al. further teaches that the water sensitive attaching means should be strong enough to hold the carrier layer together when dry and be sufficiently low so that the expanding absorbent material is not constricted during the absorption of the liquid (column 13, lines 53 – 61). Further, the wet-strength of the water-sensitive attaching means should be low enough so that the outer layers do not tear when wetted (column 13, line 65 – column 14, line 7).

Thus, it would have been obvious to one of ordinary skill in the art to use the water-sensitive attaching means taught by Tanzer et al. to form the pocket regions in the absorbent pad taught Bjornberg et al. since Tanzer et al. discloses that this produces a more efficient means of absorbing liquid because the absorbent material is allowed to expand fully and rupture the water-sensitive bonds. Therefore, claims 1, 2, and 4 – 30 are rejected.

Further, it would have been obvious to one of ordinary skill in the art to produce a border region which is bonded to approximately the same extent as the inner regions, since this would require less energy or material to form a bond between the back sheet and the cover sheet in the border region, lowering the cost to make the overall absorbent pad. Therefore, claim 3 is rejected.

6. Claims 1 – 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Baer et al. (5,938,650).

Baer et al. discloses an absorbent pad comprising two thin outer layers, at least one being porous, and a quantity of superabsorbent particles provided between the outer layers in individual unbonded open zones, or pockets, defined by intersecting heat bond lines (abstract). As shown in Figures 5 – 7, the pocket regions can be formed in various shapes. The bond lines

are uninterrupted except for the sealed margins, which are shown to be thicker than the bond lines which form the pocket regions (column 4, lines 10 – 15). The margin corresponds to the Applicant's perimeter region. The remaining bond lines correspond to the Applicant's inner region. The wider margin bonds would bond the perimeter region to a greater extent that the bond lines. The pressure caused by the swelling of superabsorbent particles can cause the bond lines to rupture around the pockets (column 2, lines 35 – 38). The outer layers may be either nonwoven materials or film materials (column 3, lines 18 – 32). The composite is formed as shown in Figure 1. Particles are deposited on the lower layer, then the top layer is applied to the composite, and then the layers are passed through a pair of rollers under heat and pressure to form the bond lines (column 3, line 57 – column 4, lines 4).

While Baer et al. fails to teach height to width ratio and length to width ratios for the pocket region, Baer et al. discloses that different bonding patterns can be used to form different sized pocket areas. Thus, it would have been obvious to one having ordinary skill in the art at the time the invention was made to choose the claimed length to width and width to height ratios of the pocket region, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. *In re Aller*, 220 F.2d 454, 105 USPQ 233 (CCPA 1955). One of ordinary skill in the art would choose the modify the shape or size of the pocket region to control the location of the absorbent material and the shape of the pocket regions so that the liquid will readily flow to the dry areas and be efficiently absorbed by the absorbent core. Therefore, claims 1, 2, and 4 – 30.

Additionally, Baer et al. does not teach modifying the margin region so that the perimeter is bonded to the same extent as the inner region. However, it would have been obvious to one

having ordinary skill in the art at the time the invention was made to choose a perimeter region bonded to the same extent as the inner region, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. It would have been obvious to one of ordinary skill in the art to use thinner perimeter regions to bond the edges so that more absorbent material can be used within the absorbent core, or to make overall narrower absorbent cores without affecting the overall absorbency of the absorbent core. Further, one of ordinary skill in the art would choose to use thinner bond lines at the perimeter to require less energy or adhesive to form the bond lines, saving money. Therefore, claim 3 is rejected.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jenna-Leigh Befumo whose telephone number is (703) 605-1170. The examiner can normally be reached on Monday - Friday (8:00 - 5:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrel Morris can be reached on (703) 308-2414. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.

Jenna-Leigh Befumo
September 3, 2003

CHERYL A. JUSKA
PRIMARY EXAMINER